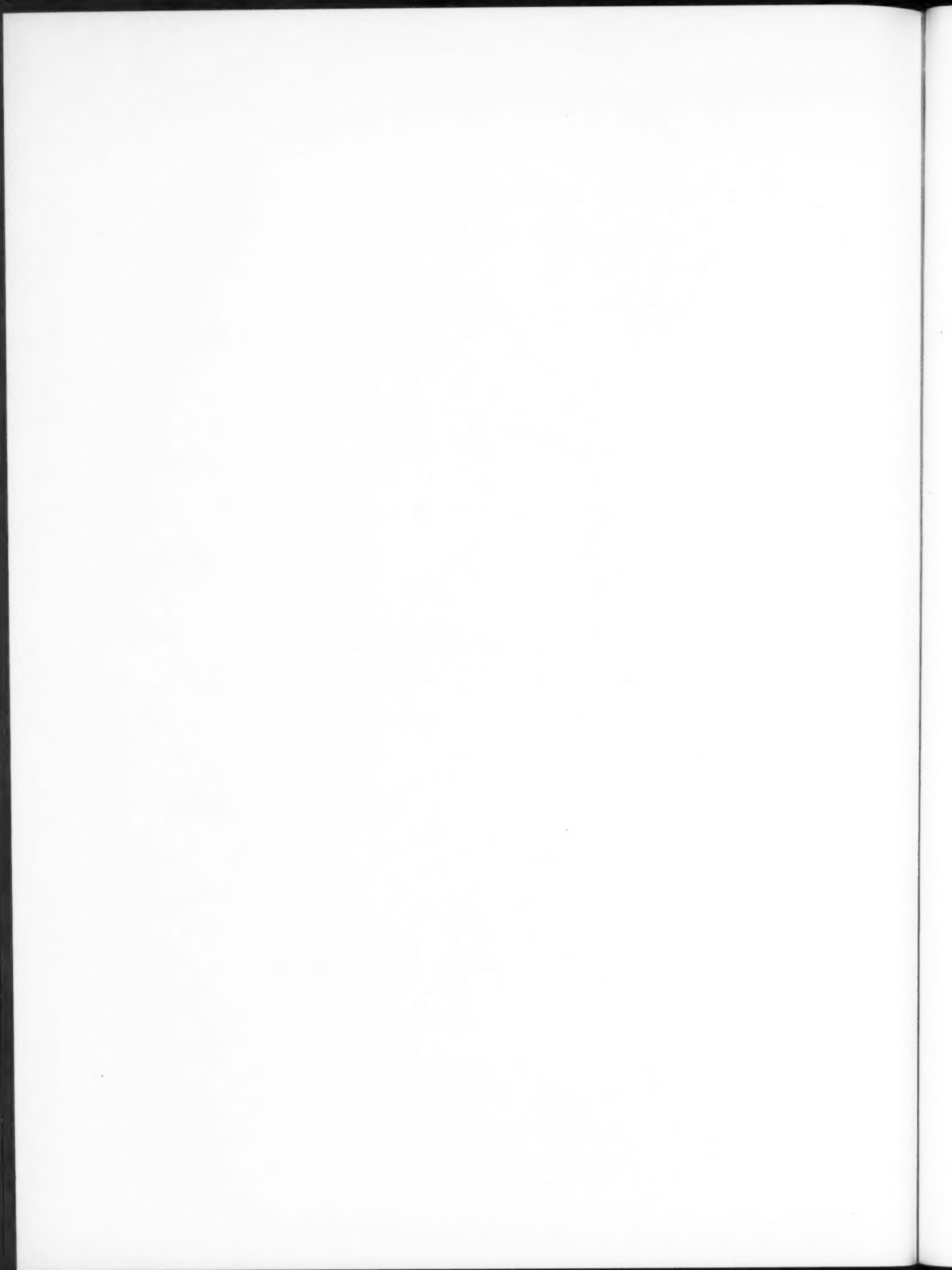


- INDEX -

MEASUREMENT TECHNIQUES

1959



- Adadurova, M. A. Universal Device for the Inspection of Direct-Reading Gages - 7
- Aglintsev, K. K., G. P. Ostromukhova and E. A. Khol'nova. Determining Ionization Work Done in Air by Gamma-Radiations Co⁶⁰ - 142
- Aglintsev, K. K. and V. V. Bochkarev. International Symposium on the Metrology of Radioactive Isotopes - 914
- Akhiezer, A. N. and A. I. Brodskii. Application of a Waveguide Bridge for Matching Detector and Generator Sections - 984
- Akhtyamov, E. Z. Automatic Sorter of Permanent Magnets - 529
- Aksyuk, Yu. F. and Ya. P. Volosin. A Device for Checking Micrometers for Dimensions Over 100 mm - 311
- Alfer'eva, N. G., see Karandeev, K. B. - 430
- Andreev, Yu. N. A Light-Weight Laboratory Sclerometer - 116
- Arapov, P. P. Contribution of the Metrological Institutes and Laboratories - 575
- Aref'ev, A. A. Three-Channel Amplifier Equipment for Thermocouple - 120
- Arnova, S. V. Repair of Lever Indicator Nipples - 254
- Artem'eva, E. V. A Differential Method of Measuring the Frequency of Electrical Oscillations - 279
- Astrov, D. N., M. P. Orlova, P. Strelkov and D. I. Sharevskaya. Comparison of Low-Temperature Scales of Platinum Resistance Thermometers - 613
- Astrov, D. N., A. S. Borovik-Romanov, M. P. Orlova and P. G. Strelkov. Evolving a Practical Temperature Scale in the Region of 10-90°K - 876
- Ataev, D. I. A Visual Method of Determining the Non-linearity of Sawtooth Voltage - 435
- Aver'yanov, M. A. To Improve Measurement Techniques in Agriculture - 923
- Bakhtin, V. I. On the Theory of Errors of a Self-Compensating Pressure Gage - 314
- Bakhtin, V. I. Dynamics of a Self-Balancing Manometer for Measuring Low Gas Pressures - 511
- Bakhtin, V. I. Resistance to Shock of an Autocompensated Manometer - 595
- Balon, Z. P., R. F. Keller, G. P. Ostromukhova and V. N. Tuchin. Calibration of γ -Dosimeters by Means of Diaphragm Beams - 989
- Baramidze, V. A. and I. G. Gol'dreer. A Method of Designing Single-Ended Self-Stabilizing Direct-Coupled Instrument Amplifiers - 977
- Barinberg, A. D. Remote Measurement of Large Displacement Angles - 938
- Belikov, E. N. Measuring Instruments at the Twelfth Exhibition of Chemical Instrumentation "Akhema 1958" - 474
- Belova, R. S. and I. I. Yankovskii. Measurements of Fast Neutron Fluxes with an Individual Dosimeter - 994
- Bobkovskaya, I. I., see Osher, I. N. - 889
- Bochkarev, E. P. Visual Characteristic-Curve Tracer for Transistors - 547
- Bochkarev, V. V., see Aglintsev, K. K. - 914
- Bolotov, B. E. An Instrument for Checking Noise in Anti-friction Bearings - 606
- Borovik-Romanov, A. S., see Astrov, D. N. - 876
- Borovik-Romanov, A. S., M. P. Orlov, and P. G. Strelkov. Establishment of a Practical Temperature Scale in the Range of 10-90°K - 961
- Borzak, N. M. and A. M. Chernyak. Device for the Complete Inspection of I-C Engine Camshafts - 98
- Bragin, B. K. A Thermoelectric Method of Evaluating the Purity of Platinum for Standard Thermocouples - 776
- Breido, I. Ya. Decatron Computer with a Preset Time or Pulse Count - 531
- Brodskii, A. D. and V. L. Kan. Increasing the Sensitivity of the Rayleigh Disc - 71
- Brodskii, A. I. Measurement of Power in the Millimeter Microwave Range - 898
- Brodskii, A. I., see Akhiezer, A. N. - 984
- Bugakov, A. F. Installing Laboratories in Two-Axle Trailers - 913
- Burdun, G. D. The 1958 Session of the International Committee of Weights and Measures - 86
- Burdun, G. D. and S. S. Shchedrovitskii. Conference of the Weights and Measures Administration of the German Democratic Republic - 663
- Burova, L. L., see Zhokhovskii, M. K. - 865
- Butskii, S. A. On the Inspection of Screw-Thread Plug Gages - 13
- Bychkovskii, K. P. Equipment for High-Precision Investigation of Aneroid Systems - 320
- Bykov, M. A. Negative Loss Angle of a Three-Terminal Capacitor - 130
- Bykov, M. A. and V. A. Volkova. Organizing the Production of High-Tension Compressed Gas Filled Capacitors - 278
- Chadaev, A. F. and E. V. Navskii. Device for Polishing Large Micrometers - 174
- Chekhonadskii, N. A. A General Approach to the Analysis of Static and Dynamic Errors - 156
- Chen Ting-Chang. Application of Strain Gages for Measuring Torque - 599
- Chernyak, A. M., see Borzak, N. M. - 98
- Chicherova, A. S. Measurements of Inside Cones by Universal Instruments - 308
- Chinarev, A. I. The First Conference of the Scientific and Technical Society of the Instrument-Making Industry - 559
- Chuduvovskii, V. Yu. Recording of Electrical Energy Consumption on an Oscillogram - 779
- Churikov, G. N. The Checking of IZM-11 Measuring Machines - 8

- Danishevskii, S. K. Selection and Calibration of Tungsten and Molybdenum Wire for Thermocouples - 333
- Dedok, I. A., see Lifshits, A. S. - 781
- Didenko, K. I. and V. M. Levin. Measurements of Small Consumption of Mazut - 816
- Dobrolenskii, Yu. P. Determining the Natural Frequency of Vibrators - 326
- Dodik, S. D. On Using Silicon Stabilitrons for the Production of Standard Voltage - 448
- Dodik, S. D. Compensated Semiconductor Stabilizers Used as Powerful Sources of Reference Voltage - 970
- Dolgushev, A. N. A Universal Test-Piece for Use with Micrometers of Throat Over 100 mm - 97
- Dolinskii, E. F. and P. P. Kremlevskii. Conference on the Measurement of Mechanical Quantities - 656
- Domanskaya, L. I., see Grashdankina, N. P. - 771
- Donde, Yu. Ya. High Voltage Test Gear - 128
- Drozdova, L. D. Checking the Flatness of Micromirrors by the Interference Method - 723
- Dukhovnyi, G. E. An Automatic Device for the Prevention of Overloading of Oscillograph Vibrations in Tensometric Measurements - 484
- Dzyuba, A. S. and P. B. Kantor. A Semiconductor Thermocryostat for Calibration of Standard Thermometers - 880
- Dzyuman, I. T. A Simplified Method of Checking Truck Scales - 486
- Efremov, A. P., see Kal'manovich, S. L. - 987
- Efremov, Yu. P. Measurement of Half-Widths of Spectral Lines by Means of a Fabry-Perot Interferometer - 756
- Efuné, I. M. A Device for Checking Wobble in Small Bearings - 255
- Efuné, I. M. Checking Low-Module Gears - 944
- Egorov, K. N. On the Absolute Determinations of the Acceleration of Gravity - 81
- Eidinov, V. Ya. Conference on Automation and Mechanization of the Control Equipment in Linear and Angular Measurements - 1008
- Ermolov, I. N. and M. F. Krakovyak. The URT-5 Ultrasonic Resonance Thickness Gage - 93
- Érvaís, A. V., see Timoshenko, L. N. - 482
- Érvaís, A. V. New End-Type Length Measuring Machines - 552
- Érvaís, A. V. Repairs of Lever Micrometers - 685
- Éstrin, B. S. and P. B. Kantor. Temperature Measurements in the Range of 300-500 C - 774
- Evstyushin, N. I. From the Council of Experts of the Committee - 488
- Finkel'shtein, E. I. A New Dividing Head - 164
- Flid, Ya. I., see Lifshits, A. S. Electronic Circuits for Differentiating DC Voltages - 527
- Fofanov, O. N. An Electromechanical Tension Dynamometer for 50,000 kg Loads - 187
- Fofanov, O. N. Errors in Checking Dynamometers with a Constant Load - 955
- Frankel' A. B. Dividing Head with a Sine Rule - 685
- Furmanov, I. M. A V.T. Voltmeter for a Radio Noise Measuring Device with Internationally Recommended Parameters - 218
- Gafanovich, M. D. Consumption-Measuring Differential Manometers with Automatic Correction for Several Gas Parameters - 810
- Garazh, E. F. Introduction of New Measuring Methods in the Plants of the Donets Region - 4
- Gauzner, S. I. First All-Union Scientific Technical Conference of Workers in the Weighing Machine Industry - 294
- Gegin, V. S., see Yanovskii, B. M. - 274
- Gidel', A. Yu. A Method of Determining Variance in the Presence of a Linear Systematic Error - 928
- Gik, L. D. A Seismic Vibration Transducer with Helical Springs - 872
- Glagovskii, B. A. Measurement of Melting Levels - 819
- Gniltskii, B. V. Checking the Strength-of-Materials Testing Machines - 153
- Gogin, Yu. N. An Adapter for Mechanical Pressure Indicators - 427
- Gol'dinov, M. A., see Volkonskii, V. A. - 752
- Gol'dreer, I. G., see Baramidze, V. A. - 977
- Golenkov, A. G. Calibration of Infrasonic Hydrophenones by the Reciprocity Method in Small Water Chambers - 637
- Golub, V. S. Method for Adjustment and Sensitivity Control of a Potentiometer-Type Voltmeter - 892
- Golub, V. S. Drawing Boards with Guiding Rules - 1007
- Gondik, S. L. Multi-Measurement Adapter for the Control of Atomizer Needles - 307
- Gonikberg, Yu. M. An Instrument for Checking the Force of a Thermostat Bellows - 265
- Gorshkov, G. V., F. M. Karavaev and N. S. Shmanskaya. Assaying Radium Preparations for Radium Content - 222
- Grashdankina, N. P., L. I. Domanskaya and A. K. Kikoin. Measurements of Temperature in High-Pressure Chambers by Means of Thermistors - 771
- Griban', P. A. A Miniature Resistance Box for Checking Ratio Meters and Bridges - 983
- Grin, G. L. and M. A. Zemel'man. A Standard Pulse-Series Generator for Checking Discrete-Operation Computers in Measuring Instruments - 209
- Grin, G. L. The Czechoslovak Exhibition of Measuring Equipment and Electronics - 740
- Grin, G. L. Methods of Constructing Electronic Discrete-Action Digital-Display Instruments and Their Relative Evaluation - 902
- Gruns, Ya. E. and E. A. Suvorov. A Transistor Instrument for Determining the Susceptibility of Rocks - 624

- Gur'ev, A. V. A High Precision Torsion Meter - 698
- Gural'nik, S. N. and A. N. Zaslavskii. Moving Coil Loop Vibrator with Concentrated Liquid Damping - 206
- Gurovich, G. Ya. A Balancing Transformer for Feeding AC Bridge Circuits - 272
- Gurovich, G. Ya. Lowering of the Bottom Limit for Measuring Inductances by a Bridge Method Combined with Substitution - 716
- Ilyukovich, A. M. Precision Measurement of AC Energy - 615
- Ilyukovich, A. M. Methods of Checking Electricity Meters - 725
- Indrik, P. V. Indrik's Weight-and-Piston Barometer - 108
- Isakov, A. I. and P. K. Parfenov. An Electrical Contact Transducer Incorporated in a Clock-Type Dial Gauge - 497
- Itsykson, I. M. and G. L. Reizina. A Device for Calculating the Clearance between the Crankshaft Journal and the Crankcase Bushing - 410
- Ivanov, A. G. Not Paltry, but Fundamental Problems - 732
- Ivanov, P. A. A Portable Electroviscometer - 224
- Ivanov, S. P. Inspection of Optical Dividing Heads - 11
- Ivanov, V. I. A Simple Method of Measuring High-Value Resistors - 782
- Kadlets, S. Ya., see Sukhov, S. A. - 121
- Kaganov, M. A. Sensitivity of Unbalanced Bridge Circuits - 623
- Kalashnikov, N. N. Factory Description of Instruments - 911
- Kal'f-Kalif, S. M. Improvement of the Differentiation Circuit for Testing of Potentiometers without a Standard Cell - 890
- Kal'manovich, S. L. and A. P. Efremov. The Effect of Temperature Variations on the Characteristics of Analytical Balances - 987
- Kan, V. L., see Brodskii, A. D. - 71
- Kanevskii, I. N. A Set for Measuring Ultrasonic Fields in Liquids - 642
- Kantor, E. L. An Electric Low Tension Switch - 714
- Kantor, P. B., see Éstrin, B. S. - 774
- Kantor, P. B., see Dzyuba, A. S. - 880
- Kantov, E. A., see Pinchuk, M. A. - 62
- Kapnik, M. Sh., see Shliomovich, M. Kh. - 356
- Karandeev, K. B. and N. G. Alfer'eva. On the Relation between Static and Dynamic Characteristics of High-Voltage Semiconductor Rectifiers - 430
- Karavaev, F. M., see Gorshkov, G. V. - 222
- Karelin, N. M. A Kinematic Method of Making Details with Curvilinear Cross-Sections and a Technique of Evaluating its Accuracy - 586
- Karlin, N. M., see Zaks, L. N. - 925
- Karpov, R. G. Measurements of Pressures Defined by the Relation $P = P_0 + p(t)$ for $p(t) \ll P_0$ - 416
- Kartasheva, A. N. Determination of Parameter R_a of Surface Roughness by Means of a Planimeter - 761
- Kasperovich, A. M. Photoelectric Amplifiers F_{17} - 348
- Katsman, K. N. On Some Problems Associated with the Organization and Activity of Factory Measuring Laboratories - 245
- Katys, G. P. Dynamic Properties of Devices for Measuring Unstable Temperatures - 230
- Katys, G. P. Discrete Measuring of Changing Flows by Means of Various Tracers - 1001
- Kazovskii, Ya. I. Improvement in the Supervision of Measurement Technology - 155
- Keimakh, Ya. I. A Truck for Checking Ten-Ton Scales - 765
- Keller, R. F., see Balon, Z. P. - 989
- Kemeshis, P. P., see Kulikovskii, L. F. - 784
- Kessel'man, S. M., see Volkonskii, V. A. - 752
- Khansuvarov, K. I. A Substandard Weight-and-Spring Piston Barometer - 109
- Khol'nova, E. A., see Aglintsev, K. K. - 142
- Kholod, G. I. and V. M. Shitikov. Device for Polishing Working Surfaces of Micrometers Measuring over 100 mm - 68
- Kikoin, A. K., see Grashdankina, N. P. - 771
- Kirenkov, I. I. Metrological Features of Color Pyrometry - 33
- Kirenkov, I. I. and É. A. Lapina. A New Method for the Determination of the Effective Wavelength of Optical and Photoelectric Brightness Pyrometers - 288
- Kitavin, V. P. Measurements of the Carrier Frequency of the RB-79 Radio Station by Means of the Heterodyne Method Using a KG-B Crystal Oscillator - 722
- Kivills, S. S. Discharge Coefficients of Diaphragms and Nozzles - 469
- Kivills, S. S. Errors in the Basic Diaphragm Discharge Coefficients - 646
- Klimushev, A. V., see Merkulov, V. S. - 996
- Kneller, V. Yu. Convergence of Automatic Balancing in Measuring Circuits with Two Balancing Elements - 189
- Kneller, V. Yu. Equal Sensitivity Curves in AC Bridge Circuits with Phase-Sensitive Indicators - 789
- Kochan, V. A. Maximum Sensitivity of a Simple Bridge Circuit At Balance - 200
- Kochenov, M. I. Certain Problems of Accuracy in Automatic Checking of Dimensions - 837
- Kokhanovskii, N. U., see Volodarskii, V. Ya. - 140
- Kolmakov, I. P. Training of State Inspectors - 152
- Kolosova, M. F. and N. A. Tkalenko. Improving the Construction of Measuring Instruments - 154
- Konovalov, N. P. A Theodolite Apparatus for Checking Angle Gages - 166
- Konovalov, M. D., V. A. Rikhter and V. N. Tarapin. A Photoelectric Instrument for Measuring Torques - 113
- Konson, A. S. On the Economic Analysis in Designing Electric Measurement Instruments - 400
- Konstantinov, A. I. An Instrument for Checking Chronometers - 863
- Kopenin, E. A. Wide-Band Piezoelectric Converters for Accelerometers - 260

- Koronkevich, V. P. and Yu. I. Trulev. Interference-Fringe Counter for Measuring Small Lengths - 581
- Korotaev, V. V. A Stabilizer for an Automatic Potentiometer Measuring Circuit Supplies - 526
- Korotkov, V. N., see Malakhov, K. N. - 858
- Korotkov, V. P., see Talts, B. A. - 406
- Korotkov, V. P. An Optical Method of Checking Kinematic Accuracy without a Prototype - 678
- Kostich, B. I. Increased Accuracy of Measurement by Means of Tape Measures - 249
- Kostich, B. E. Application of an Optical Inner Base Range Finder in a Factory Arrangement for Checking Dimensions of up to 25 m - 413
- Kostin, V. E. A Small Projector - 10
- Kostin, V. E. A Precision Microscope for the Measurement of Small Dimensions - 412
- Kotyuk, A. F. Sensitivity and Precision of the Phase Meters of a Ferrodynamic System - 53
- Kozhuk, V. Ya. and N. P. Onishchenko. A Device for the Remote Control of Dial Scales - 519
- Krakovyak, M. F., see Ermolov, I. N. - 93
- Kravtsov, A. A. and A. F. Shchurov. Measurement of Deformation by Means of Portable Indicators - 252
- Kremlevskii, P. P., see Dolinski, E. F. - 656
- Kubarev, A. V. Error of the Measurement of the Intensity of a Magnetic Field by the Method of Nuclear Magnetic Resonance - 44
- Kudakov, A. D. Circuit for the Measurement of the Volume Resistance of an Electrical Insulator - 49
- Kulikov, E. I. Measurement of the Quality Factor of Cavity Resonators with Small Damping - 462
- Kulikovskii, L. F. and P. P. Kemeshis. A Device with Two Degrees of Freedom for Measuring Vector Quantities - 784
- Kuptsov, I. A. Measurement of Dimensions in Inaccessible Places - 939
- Kurochkin, A. P. and F. V. Tsidulko. Operating Time of Pneumatic Measuring Systems - 851
- Kut'kov, A. A. Measurement of the Thickness of Lubrication Layers - 762
- Lantsman, M. Kh. Determination of Static Characteristics of a Force-Compensation System Containing an Elastic Tube - 421
- Laport, G. G. Scientific Work Carried out by the Central Physicotechnical Institute of the German Weights and Measures Administration in the Second Five-Year Plan - 669
- Leikin, A. Ya. Experimental Investigation of a Molecular Generator - 543
- Leikin, A. Ya. A System for Comparing the Frequency of a Molecular Generator with a Crystal Standard - 632
- Lessig, E. N. Calibration in Centimeter Steps of Horizontal Tanks with Cylindrical Bottom - 808
- Levin, V. M., see Didenko, K. I. - 816
- Levitskaya, N. V. Balancing to Ground High-Tension AC Bridges - 621
- Levshina, E. S., P. V. Povitskii and A. M. Turichin. Contactless Induction Torsion Meters - 18
- Lifshits, A. S. and Ya. I. Fild. Electronic Circuits for Differentiating DC Voltages - 527
- Lifshits, A. S. and I. A. Dedok. Determination of Frequency Characteristics in Designing Automatic Control Systems - 781
- Livshits, D. N. A Balanced Voltmeter with a Crystal Diode - 703
- Lirs, G. V. Inspection Laboratories of the German Weights and Measures Administration - 673
- Lishchinskii, I. P. A Revolution Counter - 428
- Lutmanova, S. N. Wall Gage - 592
- Lyapin, G. L., see Nenyukov, V. P. - 114
- Lyapin, G. L., see Nenyukov, V. P. - 323
- Lyubenko, G. F. Measuring Equipment for Investigating the Process of Rock Compression Filling - 327
- Magnitskii, Yu. A. An Optical Method of Measuring Strain in Flat Walls - 900
- Maizel', M. B. Pressure Gage with an Aneroid-Electrical Measuring Element - 15
- Malakhov, K. N. and V. N. Korotkov. Certain Problems of Weighing Technique in Railroad Transport - 858
- Malakhov, M. I. A Plea for Extending the Rights and Duties of the Industrial Test Laboratories - 733
- Malkina, O. G. Measurement of Impedances at Audio Frequencies by the Method of Magnetically Coupled Circuits - 440
- Mal'tsev, B. K., see Sirota, A. M. - 611
- Mal'tsev, B. K., see Sirota, A. M. - 969
- Malyi, D. D., see Zimin, N. I. - 256
- Markheva, F. A. Static Calibration of Accelerometers and Accelerographs by Means of Centrifugal Device - 516
- Markov, P. U. Organization of Base Laboratories - 652
- Markov, P. U. Determination of Undesirable Tapering in Punching - 174
- Marsov, A. V. Equipment for Testing Instruments at Varying Temperatures - 124
- Martynov, A. D. A Recording Extensometer - 163
- Martynov, A. D. Linear Measurements - Control of Drill Grinding by Means of an Instrument Microscope - 304
- Maslov, E. P. A Method of Extending the Range of EMF Measurements by DC Potentiometers - 718
- Matveev, V. V. and V. L. Ryaskov. Selecting a Method of Reference in Measuring the Undulation of Anti-friction Bearing Races - 855
- Melik-Shakhnazarov, A. M. Automation of Cartesian-Coordinate AC Compensators - 521
- Mergol'd, M. M. Attachments for the Optical Divider Head - 306
- Mergol'd, M. M. Preparation of Laps for the Lapping of Gauges - 503

- Merkulov, V. S. and A. V. Klinushev. Determining the Mass Content of Binary System Components by the Method of Alternating β - and γ -Radiation - 996
- Mikhatskii, Yu. V. The Design of Pulse Diode Voltmeter Circuits - 634
- Mikhatskii, Yu. V. A Cascade Reflex Voltmeter - 800
- Mikhailovskaya, K. P. Measurement of the Parameters of an Alternating Current Circuit with the Aid of an Oscilloscope - 52
- Mints, M. B., see Seliber, B. A. - 534
- Mirkin, M. S. Evaluation of Circular Components by the Harmonic Analysis Method - 946
- Naiderov, V. Z. On the Operation of the Vibrating-Reed Inverter in a DC Amplifier - 886
- Navskii, E. V., see Chadaev, A. F. - 174
- Nekhendi, E. Yu. Investigation of the Reasons for the Instability of Various Tensometer Systems at High Temperatures - 182
- Nemirovskii, A. S., see Volkonskii, V. A. - 752
- Nenyukov, V. P., A. S. Zhmur and G. L. Lyapin. A Ballistic Pendulum for Calibrating Acceleration Transducers - 114
- Nenyukov, V. P., A. S. Zhmur and G. L. Lyapin. Piezoelectric Acceleration Transducers - 323
- Nikiforov, V. V. An Internal Indicator Gage for Rings and Sleeves - 99
- Nikiforov, V. V. Measurement of Small Differences in the Angular Velocities of Two Pulleys - 697
- Nikolaev, F. N. Effect of the Internal Temperature of a Conductor on the Accuracy of Determining its Electrical Resistance - 708
- Nikolaev, V. I. Checking Squares of Over 500 mm by Simple Devices - 412
- Nikolaev, V. I. Measurement of Small Angles - 940
- Nosov, V. A. Magnetic Tape Recording of Oscillograms of Infrasonic Processes - 873
- Novgorodov, E. D. An Instrument for Measuring the Q Factor and Equivalent Resistance of Quartz Resonators - 283
- Novgorodov, E. D. The Limiting Q Values of Crystal Resonators - 720
- Novitskii, P. V., see Novopashennyi, G. N. - 454
- Novopashennyi, G. N. and P. V. Novitskii. Stepping up the Input Resistance of Semiconductor Amplifiers - 454
- Omeltchenko, A. I. Microscope for Measuring Internal Threads - 584
- Onishchenko, N. P., see Kozhuk, V. Ya. - 519
- Orlova, M. P. Reproducibility of the Boiling Temperature of Oxygen - 330
- Orlova, M. P., see Astrov, D. N. - 613
- Orlova, M. P., see Astrov, D. N. - 876
- Orlova, M. P., see Borovik-Romanov, A. S. - 961
- Osher, I. N. Automatic Testing Equipment of the "Elektroschetchik" Plant - 196
- Osher, I. N. The Quality of Electricity Meters - 292
- Osher, I. N. Errors in Measuring Reactive Power by the Two Wattmeter Method - 618
- Osher, I. N. and I. I. Bobkovskaya. Check-Testing of Induction-Type Standard Meters by a Thermoelectric Method - 889
- Osnas, V. Production of Super-Fine Abrasive Materials for End-Lapping Block Gauges - 12
- Ostromukhova, G. P., see Aglintsev, K. K. - 142
- Ostromukhova, G. P., see Bajon, Z. P. - 989
- Palatov, K. I. Consideration of Multiple Internal Reflections in the Investigation of Complex Transmission Lines Composed of Super-High Frequency Units - 457
- Palei, M. M. The Adaptation of an Opticomechanical Profilograph for the Measurement of the Waviness of Surfaces - 100
- Pankratov, G. F., see Rozhdestvenskaya, T. B. - 354
- Panov, M. P. Device for Measuring the Curvature of Boreholes - 253
- Parfenov, P. K., see Isakov, A. I. - 497
- Pavlyuk, G. D., see Sukhov, S. A. - 121
- Pazuminkhin, V. N., see Zhokhovskii, M. K. - 865
- Petropavlovskii, V. V. Weight-Measuring Equipment Repairs in Agriculture - 146
- Petrosov, V. V., see Pikalov, B. I. - 161
- Pikalov, B. I. and V. V. Petrosov. Inspection of Gas Turbine Blade Blanks - 161
- Pillipchuk, B. I. Units for the Measuring of Thermal Quantities - 26
- Pinchuk, M. A. and E. A. Kantov. Three-Phase Portable Test Apparatus - 62
- Polkova, A. Z. Stability of Block Gauges - 932
- Polulyakh, K. S. A Reactive Method of Measuring Dielectric Losses - 802
- Poritskii, G. S. and A. M. Voronov. The Forgotten Ceramic Weights - 570
- Poroshin, A. S. Mechanization of the Stamping of Weights - 485
- Potekhin, V. K. Electronic Frequency Converters for Precision Measurements - 134
- Povitskii, P. V., see Levshina, E. S. - 18
- Puchkin, B. I. An Aspect of the Effect of Temperature on the Resistance of a Conductor Covering a Surface - 329
- Rabinovich, B. E., see Strizhkov, G. M. - 797
- Rabinovich, S. G. and A. N. Tkachenko. Photocompensated Stabilized Rectifier - 48
- Rabinovich, S. G. and A. N. Tkachenko. Calculation of a Photoelectric Fluxmeter - 339
- Rabinovich, S. G., see Seliber, B. A. - 534
- Ratsiu, M. Hardness Criterion in Designing Levers for Weighing Equipment - 689

- Regirer, E. I. A Miniature Portable Piezoelectric Profilograph - 168
- Reizina, G. L., see Itsykson, I. M. - 410
- Rikhter, V. A., see Kononov, M. D. - 113
- Rozhdestvenskaya, T. B. and G. F. Pankratov. Zero Indicator for High Resistance Measuring Circuits - 354
- Rusakov, A. I. A Device for Remagnetizing Magnets in Instruments Under Repair - 893
- Rusakov, I. G. A New National Standard for Acoustic Units - 70
- Rusalovich, N. I. On the Improvement of the URT-4 Apparatus Made by "Étalon" - 297
- Rusalovich, N. I. Improvement of the MP-2.5 Equipment - 518
- Ryaskov, V. L., see Matveev, V. V. - 855
- Rynkevich, V. P. Radio Measuring Equipment at the German Democratic Republic Exhibition of Electronic Instruments - 736
- Samoilov, V. N. The Piston-Balancing Errors of Weight-and-Piston Pressure Gages - 178
- Savitskiĭ, F. S. Checking Unidirectional Hydraulic Pulsating Test Machines - 953
- Seliber, B. A., S. G. Rabinovich and M. B. Mints. Universal DC Deviation Bridges - 534
- Shamin, I. D. Improvement in the Supply of Measuring and Test Equipment - 734
- Sharevskaya, D. I., see Strelkov, P. G. - 124
- Sharevskaya, D. I., see Astrov, D. N. - 613
- Shatalov, M. I. Calculation of Errors in Comparing Frequencies by Means of Lissajou's Figures - 215
- Shchedrovitskiĭ, S. S., see Burdin, G. D. - 633
- Shchukin, V. N. Production of Spare Parts for Measuring Instruments and Gages - 260
- Shchurov, A. F., see Kravtsov, A. A. - 252
- Shepin, S. G. A Portable Set for Checking AC Ammeters and Voltmeters - 627
- Shimanskaya, N. S., see Gorshkov, G. V. - 222
- Shitikov, V. M., see Kholod, G. I. - 684
- Shlomovich, M. Kh. and M. Sh. Kapnik. A Null Indicator for DC Measuring Devices - 356
- Shneiderman, A. L. Investigation of the Intermediate Mechanisms of Dial Scales with Additional Weights - 104
- Shtein, V. G. Systematic Inspection of Gages - 175
- Shtein, V. G. Hydraulic Method of Measuring Length - 934
- Sigorskiĭ, V. P. A Conference on Electrical Circuits Using Rectifiers - 743
- Simkin, G. S. Some Problems Connected with the Application of Random Functions in Metrological Practice - 241
- Sirota, A. M. and B. K. Mal'tsev. A Gold-Platinum Thermocouple - 611
- Sirota, A. M. and B. K. Mal'tsev. A Liquid Thermostat for High Temperatures - 969
- Sizov, D. M. Experience in Organizing Base Laboratories for Supervising Measurement Equipment - 677
- Sizov, D. M. Conference for the Exchange of Experience in Introducing New Measurement Techniques - 917
- Skuratov, S. M. The Problem of Units for Measuring Thermal Quantities - 701
- Slavina, N. P., see Varnello, V. V. - 916
- Snagovskii, A. D. One More Method of Saving Metal - 568
- Sokolov, B. L. Preparing for the New Forms of Government Inspection in the Field of Measurements - 89
- Sokolov, B. L. A Systematic Improvement in Labor Productivity Is the Pressing Task of the Committee's Local Agencies - 749
- Sokolov, V. N. A Quick Method of Determining the Concentration of Solutions. - 609
- Sokolova, E. A., see Yanovskii, B. M. - 274
- Solov'ev, L. I. Measurement of Angular Displacements of Machine Details with Reversible Rotation - 694
- Stanek, I. German Weights and Measures Administration - 666
- Staroverov, N. N. Amendments to the Instructions Now in Operation for the Inspection of Measures and Measuring Devices - 238
- Startsev, A. M. A Deflection Meter - 429
- Stebelev, P. N. Idling Time of Measuring Instruments - 298
- Stebelev, P. N. Useful Courses - 912
- Stolyarov, S. M. A New State Standard: "Electrical Measuring Instruments, General Technical Specification" (GOST-1845-59) - 571
- Strelkov, P. G. and D. I. Sharevskaya. Results of Comparing Temperatures Calculated by the MShT and the Comparison Method - 124
- Strelkov, P. G., see Astrov, D. N. - 613
- Strelkov, P. G., see Astrov, D. N. - 876
- Strelkov, P. G., see Borovik-Romanov, A. S. - 961
- Strizhkov, G. M. and B. E. Rabinovich. Measurements of Current by Means of Thermistor Bridges at Frequencies up to 1000 Mc - 797
- Studentsev, N. V., see Yanovskii, B. M. - 126
- Sukhov, S. A., S. Ya. Kadlets, and G. D. Pavlyuk. Investigation of Electrolytic Thermocouples - 121
- Suvld, N. F. Measuring Instruments with Magnetic Bridges - 40
- Suvorov, A. I. The Effect of the Knife-Edge Radii of the Balance Beam Upon the Sensitivity of Balances - 102
- Suvorov, A. I. Recording of Results of State Inspection of Measures and Measuring Instruments - 487
- Suvorov, A. I. The Organization and Activity of Industrial Test Laboratories (Comments on K. N. Katsman's Article) - 822
- Suvorov, E. A., see Gruns, Ya. É. - 624
- Svirlov, M. A. Working Experience of Weighing-Equipment Repair Shops Attached to the Chernigov Region Tractor Repair Stations - 910
- Sychev, I. A. New S-Shaped Springs for Manometric Instruments - 869

- Svokon', F. F. Inspection of Measuring Equipment in the Rural Districts of Moldavia - 563
- Taitis, B. A. and V. P. Korotkov. Instruments for the Control of Kinematic Accuracy of Linkages and Machine Tools - 406
- Tanin, N. N. Checking Traction Dynamometers - 699
- Tarapin, V. N., See Konovalov, M. D. - 113
- Taratenko, A. D. A Portable Attachment for Checking Tube Voltmeters - 717
- Tikhomirova, T. N., see Yanovskii, B. M. - 126
- Timoshenko, L. N. Review of "Adjustment and Repair of Opticomechanical Measuring Instruments" by A. V. Ervais - 482
- Tkachenko, A. N., see Rabinovich, S. G. - 48
- Tkachenko, A. N., see Rabinovich, S. G. - 339
- Tkalenko, N. A., see Kolosova, M. F. - 154
- Tokar', N. G. A Standard Portable Moment-Meter - 510
- Trulev, Yu. I., see Koronkevich, V. P. - 581
- Tsidulko, F. V., see Kurochkin, A. P. - 851
- Tuchin, V. N., see Balon, Z. P. - 989
- Turichin, A. M., see Levshina, E. S. - 18
- Tyurin, N. I., see Zaks, L. M. - 925
- Ugarov, G. L. On the Inspection of Internal Dial Gages - 14
- Ulegin, V. G. Accuracy of Machines for Testing Tension and Compression in Metals - 504
- Usol'tsev, V. A. Stability of the Distillation Temperature of Carbon Dioxide - 118
- Vainshtein, A. L. On the Measurement of the Discharge of Viscous Media - 75
- Varivoda, M. S. Checking Taximeters in Taxicab Establishments - 1006
- Vamello, V. V. and N. P. Slavina. The Third International Conference on "Measurements of Hardness in Theory and Practice" - 916
- Vasilenko, I. S. Flexible Templates - 504
- Veksler, A. Z. Measurement of Angle Errors of Mutual Inductance Coils by Means of an Alternating Current Bridge - 445
- Vikhrov, G. P. A Transistorized Universal Electronic Computer - 895
- Volkonskii, V. A., M. A. Gol'dinov, S. M. Kessel'man and A. S. Nemirovskii. Analysis of the Manufacturing Error of a Discrete-Action Integrator - 752
- Volkova, V. A., see Bykov, M. A. - 278
- Volodarskii, V. Ya. and N. U. Kokhanovskii. On a Method of Modulation Meter Checking of the Standard Signal Generator Type GSS-6 - 140
- Volodarskii, V. Ya. Application of High Precision 44-I Wavemeters - 221
- Volodarskii, V. Ya. Checking Precision Wavemeters without a Secondary Frequency Standard - 285
- Volodarskii, V. Ya. Notes on Amendment No. 1 to Instructions 220-55 on Checking Heterodyne Frequency-Meters Type GCH-1M - 911
- Volosevich, F. P. A Modification to the MIS-11 Double Microscope - 172
- Volosevich, F. P. An Attachment for an Optical Dividing Head - 499
- Volosin, Ya. P., see Aksyuk, Yu. F. - 311
- Voronin, A. A. The DUG2 Universal Dynamometer Head - 23
- Voronin, A. A. Apparatus for Measuring Cutting Forces in Turning - 262
- Voronov, A. M., see Poritskii, G. S. - 570
- Vorontsov, B. N. Elimination of Excess in Instrument Making - 650
- Vorontsov, B. N. A Set of Measures and Instruments for Mobile Automobile Laboratories - 849
- Voyutskii, V. S. Application of the Phase Detector for Measuring Weak Signals - 629
- Vysotskii, A. V. A Pneumatic Detector for the Control of Coaxiality of Two Surfaces - 311
- Vysotskii, A. V. Efficiency of Automatic Control Devices - 495
- Yakubov, S. F. A Portable Press for Checking Manometers - 872
- Yakushev, A. I. For the Further Development of Methods and Devices for the Automatization of Technological Control in Machine Construction - 395
- Yankovskii, I. I., see Belova, R. S. - 994
- Yanovskii, B. M., N. V. Studentsev, and T. N. Tikhomirova. Measurement of the Gyromagnetic Ratio of a Proton in a Weak Magnetic Field - 126
- Yanovskii, B. M., E. A. Sokolova, and V. S. Gegin. Equipment for Measuring Magnetostriction in the Temperature Range of -180 to +440°C - 274
- Yugov, V. A. Simple Method of Widening the Working Frequency Band of Film Bolometers in the Superhigh Frequency Range - 139
- Zaks, L. M., N. M. Karlin and N. I. Tyurin. New Rules for State Testing of Measures and Measuring Instruments - 925
- Zaslavskii, A. N., see Gural'nik, S. N. - 205
- Zaslavskii, E. E. Simplified Calculations in Checking Analytical Balances - 107
- Zaslavskii, E. E. A Rationalized Method of Checking Scale Cars - 861
- Zel'din, E. A. Measurement of the Number of Turns without Loading the Axle - 696
- Zemel'man, M. A., see Grin, G. L. - 209
- Zemel'man, M. A. Measurements of Saw-Tooth Voltage Distortions - 539
- Zheleznyakov, G. V. The Location of Average Velocity on the Vertical in Free Water Flow - 466

- Zhelnov, V. G. An Improved Low-Frequency Band Pass Filter Circuit - 138
- Zhelnov, V. G. A Digital Electronic Instrument for Production Testing of Condensers - 882
- Zhmur, A. S., see Nenyukov, V. P. - 114
- Zhmur, A. S., see Nenyukov, V. P. - 323
- Zhodzishskii, I. L. and V. G. Zolotukhin. Determination of Sagging in Building Constructions in Field and Factory Testing - 683
- Zhokhovskii, M. K. Experimental Determination of Errors in Piston Manometers at High Pressures - 505
- Zhokhovskii, M. K. A Manometer with an Effective Piston Area Unchanged by Pressure - 593
- Zhokhovskii, M. K., V. N. Pazuminkhin, E. V. Zolotykh, and L. L. Burova. A Thermodynamic Scale for High Pressures up to 25,000 kg/cm² - 865
- Zhukovitskii, V. I. Automatic Compensation of Electroten-siometric Scales - 768
- Zhuravlev, N. M. Controlling the Curvature of Thread Gauges - 940
- Zimin, N. I. and D. D. Malyi. Standardization of Measuring Equipment for Checking Linear and Angular Dimensions - 256
- Zlatkis, T. S. On the Review of the Instructions No. 88 - 298
- Zolotukhin, V. G., see Zhodzishskii, I. L. - 683
- Zolotykh, E. V., see Zhokhovskii, M. K. - 865
- Zykov, A. I. Impedance Measurements by Means of Directional Couplers - 211

MEASUREMENT TECHNIQUES

1959, Number 1

January

CONTENTS

	PAGE	RUSS. PAGE
Development Problems in the Field of Measuring Techniques, 1959-65	1	1
Introduction of New Measuring Methods in the Plants of the Donets Region. <u>E. F. Garazh</u> . . .	4	4
<u>Linear Measurements</u>		
Universal Device for the Inspection of Direct-Reading Gages. <u>M. A. Adadurova</u>	7	6
The Checking of IZM-11 Measuring Machines. <u>G. N. Churikov</u>	8	7
A Small Projector. <u>V. E. Kostin</u>	10	8
Inspection of Optical Dividing Heads. <u>S. P. Ivanov</u>	11	10
Production of Super-Fine Abrasive Materials for End-Lapping Block Gauges. <u>V. Osnas</u>	12	11
On the Inspection of Screw-Thread Plug Gages. <u>S. A. Butskii</u>	13	12
On the Inspection of Internal Dial Gages. <u>G. L. Ugarov</u>	14	12
<u>Mechanical Measurements</u>		
Pressure Gage With an Aneroid-Electrical Measuring Element. <u>M. B. Maizel'</u>	15	15
Contactless Induction Torsion Meters. <u>E. S. Levshina, P. V. Povitskii and A. M. Turichin</u> . . .	18	16
The DUG3 Universal Dynamometer Head. <u>A. A. Voronin</u>	23	20
<u>Thermotechnical Measurements</u>		
Units for the Measuring of Thermal Quantities. <u>B. I. Pilipchuk</u>	26	23
Metrological Features of Color Pyrometry. <u>I. I. Kirenkov</u>	33	28
D. L. Orshanskii (On his 60th Birthday).	38	32
<u>Electrical Measurements</u>		
Measuring Instruments with Magnetic Bridges. <u>N. F. Suvid</u>	40	33
Error of the Measurement of the Intensity of a Magnetic Field by the Method of Nuclear Magnetic Resonance. <u>A. V. Kubarev</u>	44	37
Photocompensated Stabilized Rectifier. <u>S. G. Rabinovich and A. N. Tkachenko</u>	48	39
Circuit for the Measurement of the Volume Resistance of an Electrical Insulator. <u>A. D. Kudakov</u>	49	40
Measurement of the Parameters of an Alternating Current Circuit with the Aid of an Oscil- loscope. <u>K. P. Mikhailovskaya</u>	52	42

CONTENTS (continued)

	PAGE	RUSS. PAGE
Sensitivity and Precision of the Phase Meters of a Ferrodynamic System. <u>A. F. Kotyuk</u>	53	43
Three-Phase Portable Test Apparatus. <u>M. A. Pinchuk and E. A. Kantov</u>	62	49
<u>Radiation Measurements</u>		
Determination of the Lowest Admissible Source Activity in Radioisotope Detectors	64	51
<u>Acoustic Measurements</u>		
A New National Standard for Acoustic Units. <u>I. G. Rusakov</u>	70	55
Increasing the Sensitivity of the Rayleigh Disc. <u>A. D. Brodskii and V. L. Kan</u>	71	56
<u>Measurements of Gas or Liquid Flow</u>		
On the Measurement of the Discharge of Viscous Media. <u>A. L. Vainshtein</u>	75	58
<u>Information</u>		
On the Absolute Determinations of the Acceleration of Gravity. <u>K. N. Egorov</u>	81	63

MEASUREMENT TECHNIQUES

1959, Number 2

February

CONTENTS

	PAGE	RUSS. PAGE
The Imposing Program of Building Communism on a Broad Front, and the Task of the Workers in Metrology	83	1
The 1958 Session of the International Committee of Weights and Measures. <u>G. D. Burdun</u>	86	4
Preparing for the New Forms of Government Inspection in the Field of Measurements. <u>B. L. Sokolov</u>	89	7
Linear Measurements		
The URT-5 Ultrasonic Resonance Thickness Gage. <u>I. N. Ermolov and M. F. Krakoviyak</u> . .	93	7
A Universal Test-Piece for Use with Micrometers of Throat Over 100 mm. <u>A. N. Dolgushev</u>	97	14
Device for the Complete Inspection of I-C Engine Camshafts. <u>N. M. Borzak and A. M. Chernyak</u>	98	15
An Internal Indicator Gage for Rings and Sleeves. <u>V. V. Nikiforov</u>	99	15
The Adaptation of an Opticomechanical Profilograph for the Measurement of the Waviness of Surfaces. <u>M. M. Palei</u>	100	16
Mechanical Measurements		
The Effect of the Knife-Edge Radii of the Balance Beam Upon the Sensitivity of Balances. <u>A. I. Suvorov</u>	102	18
Investigation of the Intermediate Mechanisms of Dial Scales with Additional Weights. <u>A. L. Shneiderman</u>	104	20
Simplified Calculations in Checking Analytical Balances. <u>E. E. Zaslavskii</u>	107	22
Indrik's Weight-and-Piston Barometer. <u>P. V. Indrik</u>	108	23
A Substandard Weight-and-Spring Piston Barometer. <u>K. I. Khansuvarov</u>	109	24
A Photoelectric Instrument for Measuring Torques. <u>M. D. Konovalov, V. A. Rikhter and V. N. Tarapin</u>	113	28
A Ballistic Pendulum for Calibrating Acceleration Transducers. <u>V. P. Nenyukov, A. S. Zhmur and G. L. Lyapin</u>	114	29
A Light-Weight Laboratory Sclerometer. <u>Yu. N. Andreev</u>	116	31
Heat Measurements		
Stability of the Distillation Temperature of Carbon Dioxide. <u>V. A. Usol'tsev</u>	118	31

CONTENTS (continued)

	PAGE	RUSS. PAGE
Three-Channel Amplifier Equipment for Thermocouples. <u>A. A. Aref'ev</u>	120	34
Investigation of Electrolytic Thermocouples. <u>S. A. Sukhov, S. Ya. Kadlets and G. D. Pavlyuk</u>	121	35
Equipment for Testing Instruments at Varying Temperatures. <u>A. V. Marsov</u>	124	37
Results of Comparing Temperatures Calculated by the MShT and the Comparison Method. <u>P. G. Strelkov and D. I. Sharevskaya</u>	124	38
Electrical Measurements		
Measurement of the Gyromagnetic Ratio of a Proton in a Weak Magnetic Field. <u>B. M. Yanovskii, N. V. Studentsev and T. N. Tikhomirova</u>	126	39
High Voltage Test Gear. <u>Yu. Ya. Donde</u>	128	41
Negative Loss Angle of a Three-Terminal Capacitor. <u>M. A. Bykov</u>	130	43
High and Ultrahigh Frequency Measurements		
Electronic Frequency Converters for Precision Measurements. <u>V. K. Potekhin</u>	134	46
An Improved Low-Frequency-Band Pass Filter Circuit. <u>V. G. Zhelnov</u>	138	49
Simple Method of Widening the Working Frequency Band of Film Bolometers in the Super-High Frequency Range. <u>V. A. Yugov</u>	139	50
On a Method of Modulation Meter Checking of the Standard Signal Generator Type GSS-6. <u>V. Ya. Volodarskii and N. U. Kokhanovskii</u>	140	50
Radiation Measurements		
Determining Ionization Work Done in Air by Gamma-Radiations Co ⁶⁰ . <u>K. K. Aglintsev, G. P. Ostromukhova and E. A. Khol'nova</u>	142	52
Information		
The Second Session of the International Committee on Legislative Metrology.	144	53
Materials Received by the Editorial Board		
Weight-Measuring Equipment Repairs in Agriculture. <u>V. V. Petropavlovskii</u>	146	54
Improving the Organization of Weight-Measuring Equipment Repairs	147	55
Improvement of the Work of Administrative Inspection Agencies	149	56
Accuracy of a Measuring Instrument	151	59
Training of State Inspectors. <u>I. P. Kolmakov</u>	152	59
Checking the Strength-of-Materials Testing Machines. <u>B. V. Gnilitiskii</u>	153	60
Improving the Construction of Measuring Instruments. <u>M. F. Kolosova and N. A. Tkalenko</u>	154	61

MEASUREMENT TECHNIQUES

1959 Number 3

March

CONTENTS

	PAGE	RUSS. PAGE
Improvement in the Supervision of Measurement Technology. <u>Ya. I. Kazovskii</u>	155	1
A General Approach to the Analysis of Static and Dynamic Errors. <u>N. A. Chekhonadskii</u>	156	2
Linear Measurements		
Inspection of Gas Turbine Blade Blanks. <u>B. I. Pikalov and V. V. Petrosov</u>	161	5
A Recording Extensometer. <u>A. D. Martynov</u>	163	7
A New Dividing Head. <u>E. I. Finkel'shtein</u>	164	8
A Theodolite Apparatus for Checking Angle Gages. <u>N. P. Konovalov</u>	166	9
A Miniature Portable Piezoelectric Profilograph. <u>E. I. Regirer</u>	168	11
A Modification to the MIS-11 Double Microscope. <u>F. P. Volosevich</u>	172	14
Determination of Undesirable Tapering in Punching. <u>P. U. Markov</u>	174	15
Device for Polishing Large Micrometers. <u>A. F. Chadaev and E. V. Navskii</u>	174	16
Systematic Inspection of Gages. <u>V. G. Shtein</u>	175	16
The Piston-Balancing Errors of Weight-and-Piston Pressure Gages. <u>V. N. Samoilov</u>	178	19
Investigation of the Reasons for the Instability of Various Tensiometer Systems at High Temperatures. <u>E. Yu. Nekhendzi</u>	182	21
An Electromechanical Tension Dynamometer for 50,000 kg Loads. <u>O. N. Fofanov</u>	187	25
Electrical Measurements		
Convergence of Automatic Balancing in Measuring Circuits with Two Balancing Elements. <u>V. Yu. Kneller</u>	189	27
Automatic Testing Equipment of the "Elektroschetchik" Plant. <u>I. N. Osher</u>	196	32
Maximum Sensitivity of a Simple Bridge Circuit at Balance. <u>V. A. Kochan</u>	200	36

CONTENTS (continued)

	PAGE	RUSS. PAGE
Moving Coil Loop Vibrator With Concentrated Liquid Damping. <u>S. N. Gural'nik and A. N. Zaslavskii</u>	206	39
High and Ultrahigh Frequency Measurements		
A Standard Pulse-Series Generator for Checking Discrete-Operation Computers in Measuring Instruments. <u>G. L. Grin and</u> <u>M. A. Zemel'man</u>	209	42
Impedance Measurements by Means of Directional Couplers. <u>A. I. Zykov</u>	211	44
Calculation of Errors in Comparing Frequencies by Means of Lissajou's Figures. <u>M. I. Shatalov</u>	215	46
A V. T. Voltmeter for a Radio Noise Measuring Device with Internationally Recommended Parameters. <u>I. M. Furmanov</u>	218	48
Application of High Precision 44-1 Wavemeters. <u>V. Ya. Volodarskii</u>	221	51
Radiation Measurements		
Assaying Radium Preparations for Radium Content. <u>G. V. Gorshkov,</u> <u>F. M. Karavaev, and N. S. Shimanskaya</u>	222	52
A Portable Electroviscometer. <u>P. A. Ivanov</u>	224	54
Essays and Reviews		
Dynamic Properties of Devices for Measuring Unstable Temperatures. <u>G. P. Katys</u>	230	58
Committee of Measures Standards, Measures, and Measuring Devices		
I. New Standards for Measures and Measuring Devices Approved by the Committee	237	63
II. Measures and Measuring Devices Approved by the Committee on the Basis of Official Tests and Admitted for Use in the USSR	237	63
Amendments to the Instructions now in Operation for the Inspection of Measures and Measuring Devices. <u>N. N. Staroverov</u>	238	63

MEASUREMENT TECHNIQUES

1959, Number 4

April

CONTENTS

	PAGE	RUSS. PAGE
Some Problems Connected with the Application of Random Functions in Metrological Practice. <u>G. S. Simkin</u>	241	1
On Some Problems Associated with the Organization and Activity of Factory Measuring Laboratories. <u>K. N. Katsman</u>	245	4
International Symposium on Interferometry	248	6
<u>Linear Measurements</u>		
Increased Accuracy of Measurements by Means of Tape Measures. <u>B. E. Kostich</u>	249	7
Measurements of Deformation by Means of Portable Indicators. <u>A. A. Kravtsov and A. F. Shchurov</u>	252	9
Device for Measuring the Curvature of Boreholes. <u>M. P. Panov</u>	253	10
Repair of Lever Indicator Nipples. <u>S. V. Aronova</u>	254	11
A Device for Checking Wobble in Small Bearings. <u>I. M. Efuné</u>	255	12
Standardization of Measuring Equipment for Checking Linear and Angular Dimensions. <u>N. I. Zimin and D. D. Malyi</u>	256	12
Production of Spare Parts for Measuring Instruments and Gages. <u>V. N. Shchukin</u>	260	16
<u>Mechanical Measurements</u>		
Apparatus for Measuring Cutting Forces in Turning. <u>A. A. Voronin</u>	262	17
An Instrument for Checking the Force of a Thermostat Bellows. <u>Yu. M. Gonikberg</u>	265	20
<u>Electrical Measurements</u>		
Wide-Band Piezoelectric Converters for Accelerometers. <u>E. A. Kopenin</u>	266	21
A Balancing Transformer for Feeding AC Bridge Circuits. <u>G. Ya. Gurovich</u>	272	26
Equipment for Measuring Magnetostriction in the Temperature Range of -180 to +440°C. <u>B. M. Yanovskii, E. A. Sokolova, and V. S. Gegin</u>	274	27
Organizing the Production of High-Tension Compressed Gas Filled Capacitors. <u>M. A. Bykov and V. A. Volkova</u>	278	30
<u>Measurements at High and Ultra-High Frequencies</u>		
A Differential Method of Measuring the Frequency of Electrical Oscillations. <u>E. V. Artem'eva</u>	279	31

CONTENTS (continued)

	PAGE	RUSS. PAGE
An Instrument for Measuring the Q Factor and Equivalent Resistance of Quartz Resonators. <u>E. D. Novgorodov</u>	283	33
Checking Precision Wavemeters without a Secondary Frequency Standard. <u>V. Ya. Volodarskii</u>	285	35
<u>Thermotechnical Measurements</u>		
A New Method for the Determination of the Effective Wavelength of Optical and Photo- electric Brightness Pyrometers. <u>I. I. Kirenkov and É. A. Lapina</u>	288	37
The Quality of Electricity Meters. <u>I. N. Osher</u>	292	40
First All-Union Scientific Technical Conference of Workers in the Weighing Machine Industry. <u>S. I. Gauzner</u>	294	41
Establishment of a World Center for the Compilation Storage, and Dissemination of IGY Data.	295	42
M. F. Romanova	295	42
On the Improvement of the URT-4 Apparatus Made by "Étalon". <u>N. I. Rusalovich</u>	297	43
On the Review of the Instructions No. 88. <u>T. S. Zlatkis</u>	298	44
Idling Time of Measuring Instruments. <u>P. N. Stebelev</u>	298	44

MEASUREMENT TECHNIQUES

1959, Number 5

May

CONTENTS

	RUSS. PAGE	PAGE
Radio Electronics - The Most Important Tool of Technical Progress	1	301
Linear Measurements - Control of Drill Grinding by Means of an Instrument Micro- scope. <u>A. D. Martynov</u>	3	304
Attachments for the Optical Divider Head. <u>M. M. Mergol'd</u>	4	306
Multi-Measurement Adapter for the Control of Atomizer Needles. <u>S. L. Gondik</u>	6	307
Measurement of Inside Cones by Universal Instruments. <u>A. S. Chicherova</u>	7	308
A Device for Checking Micrometers for Dimensions Over 100 mm. <u>Yu. F. Aksyuk</u> and <u>Ya. P. Volosin</u>	9	311
A Pneumatic Detector for the Control of Coaxiality of Two Surfaces. <u>A. V. Vysotskii</u> ..	9	311
On the Theory of Errors of Self-Compensating Pressure Gage. <u>V. I. Bakhtin</u>	11	314
Equipment for High Precision Investigation of Aneroid Systems. <u>K. P. Bychkovskii</u>	15	320
Piezoelectric Acceleration Transducers. <u>V. P. Nenyukov</u> , <u>A. S. Zhmur</u> and <u>G. L. Lyapin</u>	17	323
Determining the Natural Frequency of Vibrators. <u>Yu. P. Dobrolenskii</u>	19	326
Measuring Equipment for Investigating the Process of Rock Compression Filling. <u>G. F.</u> <u>Lyubenko</u>	20	327
An Aspect of the Effect of Temperature on the Resistance of a Conductor Covering a Surface. <u>B. I. Puchkin</u>	22	329
Thermotechnical Measurements		
Reproducibility of the Boiling Temperature of Oxygen. <u>M. P. Orlova</u>	23	330
Selection and Calibration of Tungsten and Molybdenum Wire for Thermocouples. <u>S. K. Danishevskii</u>	25	333
Electrical Measurements		
Calculation of a Photoelectric Fluxmeter. <u>S. G. Rabinovich</u> and <u>A. N. Tkachenko</u>	30	339
Photoelectric Amplifiers F ₁₇ . <u>A. M. Kasperovich</u>	35	348
Zero Indicator for High Resistance Measuring Circuits. <u>T. B. Rozhdestvenskaya</u> and <u>G. F. Pankratov</u>	39	354
A Null Indicator for DC Measuring Devices. <u>M. Kh. Shliomovich</u> and <u>M. Sh.</u> <u>Kapnik</u>	41	356

CONTENTS (continued)

	RUSS. PAGE	PAGE
Measurements at High and Ultrahigh Frequencies		
Frequency Errors in Measuring Capacity by Means of Q Meters. <u>G. M. Strizhkov</u>	45	362
Frequency Deviation Meter Errors and a Method of Checking Them. <u>I. M. Sorkin</u>	48	366
Measuring the Voltage Standing-Wave Ratio of a Generator by Means of a Phase Shifter. <u>L. S. Liberman</u>	52	372
A Transistor Amplifier for Operation with Measuring Wire Transducers. <u>P. V. Novitskii</u> and <u>G. N. Novopashennyi</u>	53	374
Equipment for Measuring Permittivity at Super-High Frequencies. <u>A. I. Tereshchenko</u>	54	375
Acoustical Measurements		
Calibration of Objective Noise-Meters by Meand of "Standard" Noises. <u>D. Z. Lopashev</u> . . .	56	377
Radiation Measurements		
An Ionization Chamber for Absolute Measurements of the Radioactivity of Preparations. <u>F. M. Karavaev</u>	60	381
Radioactive Sources in Measurement Techniques. <u>V. S. Merkulov</u>	62	384
The Committee of Standards, Measures, and Measuring Instruments		
New Specifications for Measures and Measuring Instruments Approved by the Committee on		
New Standards	64	387

MEASUREMENT TECHNIQUES

1959, Number 6

June

CONTENTS

	PAGE	RUSS. PAGE
Introduction of Advanced Measurement Techniques and Instruments for the Automatization of Control and Regulation of Industrial Processes — an Important Task of the National Economy	391	1
For the Further Development of Methods and Devices for the Automatization of Technological Control in Machine Construction. <u>A.I. Yakushev</u>	395	5
On the Economic Analysis in Designing Electric Measurement Instruments. <u>A.S. Konson</u> . .	400	9
Linear Measurements		
Instruments for the Control of Kinematic Accuracy of Linkages and Machine Tools. <u>B.A. Taits</u> and <u>V.P. Korotkov</u>	406	12
A Device for Calculating the Clearance between the Crankshaft Journal and the Crankcase Bushing. <u>L.M. Itsykson</u> and <u>G.L. Reizina</u>	410	16
Checking Squares of Over 500 mm by Simple Devices. <u>V.I. Nikolaev</u>	412	17
A Precision Microscope for the Measurement of Small Dimensions. <u>V.E. Kostin</u>	412	18
Application of an Optical Inner Base Range Finder in a Factory Arrangement for Checking Dimensions of up to 25 m. <u>B.E. Kostich</u>	413	19
Mechanical Measurements		
Measurements of Pressures Defined by the Relation $P = P_0 + p(t)$ for $p(t) \ll P_0$. <u>R.G. Karpov</u>	416	21
Determination of Static Characteristics of a Force-Compensation System Containing an Elastic Tube. <u>M.Kh. Lantsman</u>	421	25
An Adapter for Mechanical Pressure Indicators. <u>Yu.N. Gogin</u>	427	29
A Revolution Counter. <u>I.P. Lishchinskii</u>	428	30
A Deflection Meter. <u>A.M. Startsev</u>	429	31
Electrical Measurements		
On the Relation between Static and Dynamic Characteristics of High-Voltage Semiconductor Rectifiers. <u>K.B. Karandeev</u> and <u>N.G. Alfer'eva</u>	430	32
A Visual Method of Determining the Nonlinearity of Sawtooth Voltage. <u>D.I. Ataev</u>	435	35
Measurement of Impedances at Audio Frequencies by the Method of Magnetically Coupled Circuits. <u>O.G. Malkina</u>	440	39
Measurement of Angle Errors of Mutual Inductance Coils by Means of an Alternating Current Bridge. <u>A.Z. Veksler</u>	445	42

CONTENTS (continued)

	PAGE	RUSS. PAGE
On Using Silicon Stabilitrons for the Production of Standard Voltage. <u>S.D. Dodik</u>	448	45
Measurements at High and Super-High Frequencies		
Stepping Up the Input Resistance of Semiconductor Amplifiers. <u>G.N. Novopashennyi and P.V. Novitskii</u>	454	49
Consideration of Multiple Internal Reflections in the Investigation of Complex Transmission Lines Composed of Super-High-Frequency Units. <u>K.I. Palatov</u>	457	51
Measurement of the Quality Factor of Cavity Resonators with Small Damping. <u>E.I. Kulikov</u>	462	55
Liquid and Gas Flow Measurements		
The Location of Average Velocity on the Vertical in Free Water Flow. <u>G.V. Zheleznyakov</u>	466	58
Discharge Coefficients of Diaphragms and Nozzles. <u>S.S. Kivilis</u>	469	60
Essays and Reviews		
Measuring Instruments at the Twelfth Exhibition of Chemical Instrumentation "AkHEMA 1958." <u>E.N. Belikov</u>	474	64
Information		
Problems in Measurement Automation Discussed at the Intercollegiate Scientific Conference	478	67
From the National Committee of the USSR for Automatic Control	481	69
Book Reviews		
A.V. Ervais: Adjustment and Repair of Opticomechanical Measuring Instruments, Mashgiz, Moscow, 1958, 458 pp., 237 illus., 8000 copies. <u>L.N. Timoshenko</u>	482	70
Material Received by the Editorial Board		
An Automatic Device for the Prevention of Overloading of Oscillograph Vibrations in Tensometric Measurements. <u>G.E. Dukhovnyi</u>	484	71
Mechanization of the Stamping of Weights. <u>A.S. Poroshin</u>	485	72
A Simplified Method of Checking Truck Scales. <u>I.T. Dzyuman</u>	486	72
Recording of Results of State Inspection of Measures and Measuring Instruments. <u>A.I. Suvorov</u>	487	73
Committee on Standards, Measures, and Measuring Instruments		
From the Council of Experts of the Committee. <u>N.I. Evstyushin</u>	488	74
Measures and Measuring Instruments Approved by the Committee According to State Inspection Results and Authorized for Use in the USSR	491	76

MEASUREMENT TECHNIQUES

1959, Number 7

July

CONTENTS

	PAGE	RUSS. PAGE
Let Us Fulfill the Decisions of the June Plenary Session of the CPSU Central Committee	493	1
Linear Measurements		
Efficiency of Automatic Control Devices. <u>A. V. Vysotskii</u>	495	3
An Electrical Contact Transducer Incorporated in a Clock-Type Dial Gauge. <u>A. I. Isakov</u> and <u>P. K. Parfenov</u>	497	4
An Attachment for an Optical Dividing Head. <u>F. P. Volosevich</u>	499	6
Preparation of Laps for the Lapping of Gauges. <u>M. M. Mergol'd</u>	503	10
Flexible Templates. <u>I. S. Vasilenko</u>	504	10
Mechanical Measurements		
Experimental Determination of Errors in Piston Manometers at High Pressures. <u>M. K. Zhokhovskii</u>	505	11
A Standard Portable Moment-Meter. <u>N. G. Tokar'</u>	510	14
Dynamics of a Self-Balancing Manometer for Measuring Low Gas Pressures. <u>V. I. Bakhtin</u>	511	16
Static Calibration of Accelerometers and Accelerographs by Means of a Centrifugal Device <u>F. A. Markhevka</u>	516	18
Improvement of the MP-2.5 Equipment <u>N. I. Rusalovich</u>	518	20
Measurements of Mass		
A Device for the Remote Control of Dial Scales. <u>V. Ya. Kozhuk</u> and <u>N. P. Onishchenko</u>	519	21
Electrical Measurements		
Automation of Cartesian-Coordinate AC Compensators. <u>A. M. Melik-Shakhnazarov</u>	521	23
A Stabilizer for an Automatic Potentiometer Measuring Circuit Supplies. <u>V. V. Korotaev</u>	526	27
Electronic Circuits for Differentiating DC Voltages. <u>A. S. Lifshits</u> and <u>Ya. I. Flid</u>	527	28
Automatic Sorter of Permanent Magnets. <u>E. Z. Akhtyamov</u>	529	30
Decatron Computer with a Preset Time or Pulse Count. <u>I. Ya. Breido</u>	531	32
Universal DC Deviation Bridges. <u>B. A. Seliber</u> , <u>S. G. Rabinovich</u> and <u>M. B. Mints</u>	534	35
Measurements of Saw-Tooth Voltage Distortions. <u>M. A. Zemel'man</u>	539	38

CONTENTS (continued)

	PAGE	RUSS. PAGE
High and Ultrahigh Frequency Measurements		
Experimental Investigation of a Molecular Generator, <u>A. Ya. Leikin</u>	543	41
Visual Characteristic-Curve Tracer for Transistors, <u>E. P. Bochkarev</u>	547	44
Reviews and Essays		
New End-Type Length Measuring Machines, <u>A. V. Ērvals</u> ,	552	48
Information		
The First Conference of the Scientific and Technical Society of the Instrument-Making Industry, <u>A. I. Chinarev</u>	559	54
Brno International Fair	560	54
Materials Received by the Editorial Board		
Improved Supervision of Measuring Instruments in Rural Districts	561	55
Inspection of Measuring Equipment in the Rural Districts of Moldavia, <u>F. F. Svokon'</u>	563	57
Let Us Make Better Preparations for Introducing Regulation 12-58	566	59
One More Method of Saving Metal, <u>A. D. Snagovskii</u>	568	60
An Important Task of National Economy.	568	61
The Forgotten Ceramic Weights, <u>G. S. Poritskii and A. M. Voronov</u>	570	62
In the Committee of Standards, Measures and Measuring Instruments		
A New State Standard: "Electrical Measuring Instruments, General Technical Specification" (GOST 1845-59), <u>S. M. Stolyarov</u> ,	571	63
New Specifications for Measures and Measuring Instruments Approved by the Committee, ...	573	64

CONTENTS

	PAGE	RUSS. PAGE
Contribution of the Metrological Institutes and Laboratories. <u>P. P. Arapov</u>	575	1
Linear Measurements		
Interference-Fringe Counter For Measuring Small Lengths. <u>V. P. Koronkevich and Yu. I. Trulev</u>	581	5
Microscope For Measuring Internal Threads. <u>A. I. Omel'chenko</u>	584	7
A Kinematic Method of Making Details With Curvilinear Cross Sections and a Technique of Evaluating Its Accuracy. <u>N. M. Karelin</u>	586	9
Wall Gage. <u>S. N. Lutmanova</u>	592	13
Mechanical Measurements		
A Manometer With an Effective Piston Area Unchanged by Pressure. <u>M. K. Zhokhovskii</u> ...	593	14
Resistance to Shock of an Autocompensated Manometer. <u>V. I. Bakhtin</u>	595	15
Application of Strain Gages For Measuring Torque. <u>Chen Ting-Chang</u>	599	18
Accuracy of Machines For Testing Tension and Compression in Metals. <u>V. G. Ulegin</u>	604	22
An Instrument For Checking Noise in Antifriction Bearings. <u>B. E. Bolotov</u>	606	24
Measurements of Mass		
A Quick Method of Determining the Concentration of Solutions. <u>V. N. Sokolov</u>	609	25
Thermotechnical Measurements		
A Gold-Platinum Thermocouple. <u>A. M. Sirota and B. K. Mal'tsev</u>	611	27
Comparison of Low-Temperature Scales of Platinum Resistance Thermometers. <u>D. N. Astrov, M. P. Orlova, P. G. Strelkov and D. I. Sharevskaya</u>	613	29
Electrical Measurements		
Precision Measurement of AC Energy. <u>A. M. Ilyukovich</u>	615	29
Errors in Measuring Reactive Power by the Two Wattmeter Method. <u>I. N. Osher</u>	618	32
Balancing to Ground High-Tension AC Bridges. <u>N. V. Levitskaya</u>	621	35
Sensitivity of Unbalanced Bridge Circuits. <u>M. A. Kaganov</u>	623	37
A Transistor Instrument For Determining the Susceptibility of Rocks. <u>Ya. É. Gruns and E. A. Suvorov</u>	624	37

CONTENTS (continued)

	PAGE	RUSS. PAGE
A Portable Set For Checking AC Ammeters and Voltmeters. <u>S. G. Shepelin</u>	627	40
Measurements at High and Ultrahigh Frequencies		
Application of the Phase Detector For Measuring Weak Signals. <u>V. S. Voyutskii</u>	629	40
A System For Comparing The Frequency of a Molecular Generator With a Crystal Standard. <u>A. Ya. Leikin</u>	632	43
The Design of Pulse Diode Voltmeter Circuits. <u>Yu. V. Mikhatskii</u>	634	44
Acoustical Measurements		
Calibration of Infrasonic Hydrophones by the Reciprocity Method in Small Water Chambers. <u>A. G. Golenkov</u>	637	47
A Set For Measuring Ultrasonic Fields in Liquids. <u>I. N. Kanevskii</u>	642	51
Measurement of Liquid And Gas Flow		
Errors in the Basic Diaphragm Discharge Coefficients. <u>S. S. Kivilis</u>	646	54
Material Received by the Editorial Board		
Elimination of Excess in Instrument Making. <u>B. N. Vorontsov</u>	650	57
Organization of Base Laboratories. <u>P. U. Markov</u>	652	59
Improvement of the Work of Administrative Inspection Agencies	654	60
Information		
Conference on the Measurement of Mechanical Quantities. <u>E. F. Dolinskii and P. P. Kremlevskii</u>	656	61
Czechoslovak Exhibition of Measurement Techniques and Electronics	659	63
The Committee of Standards, Measures, and Measuring Instruments		
Measures and Measuring Instruments Approved by the Committee as the Result of State Tests and Passed for Use in the USSR	660	64

CONTENTS

	PAGE	RUSS. PAGE
Ensuring a Metrological Basis for Analytical Measurements	661	1
Conference of the Weights and Measures Administration of the German Democratic Republic. <u>G. D. Burdun</u> and <u>S. S. Shchedrovitskii</u>	663	3
German Weights and Measures Administration. <u>I. Stanek</u>	666	5
Scientific Work Carried out by the Central Physicotechnical Institute of the German Weights and Measures Administration in the Second Five-Year Plan. <u>G. G. Laport</u>	669	8
Inspection Laboratories of the German Weights and Measures Administration. <u>G. V. Lirs</u>	673	12
Experience in Organizing Base Laboratories for Supervising Measurement Equipment. <u>D. M. Sizov</u>	677	15
Linear Measurements		
An Optical Method of Checking Kinematic Accuracy without a Prototype. <u>V. P. Korotkov</u> . .	678	16
Determination of Sagging in Building Constructions in Field and Factory Testing. <u>I. L. Zhodzishskii</u> and <u>V. G. Zolotukhin</u>	683	19
Device for Polishing Working Surfaces of Micrometers Measuring over 100 mm. <u>G. I. Kholod</u> and <u>V. M. Shitikov</u>	684	20
Dividing Head with a Sine Rule. <u>A. B. Frankel'</u>	685	21
Repairs of Lever Micrometers. <u>A. V. Ervais</u>	685	21
Mechanical Measurements		
Hardness Criterion in Designing Levers for Weighing Equipment. <u>M. Ratsiu</u>	689	24
Measurement of Angular Displacements of Machine Details with Reversible Rotation. <u>L. I. Solov'ev</u>	694	27
Measurement of the Number of Turns without Loading the Axle. <u>E. A. Zel'din</u>	696	28
Measurement of Small Differences in the Angular Velocities of Two Pulleys. <u>V. V. Nikiforov</u>	697	29
A High Precision Torsion Meter. <u>A. V. Gur'ev</u>	698	30
Checking Traction Dynamometers. <u>N. N. Tanin</u>	699	31
Thermotechnical Measurements		
The Problem of Units for Measuring Thermal Quantities. <u>S. M. Skuratov</u>	701	32

CONTENTS (continued)

	PAGE	RUSS. PAGE
Electrical Measurements		
A Balanced Voltmeter with a Crystal Diode. <u>D. N. Livshits</u>	703	33
Effect of the Internal Temperature of a Conductor on the Accuracy of Determining its Electrical Resistance. <u>F. N. Nikolaev</u>	708	37
An Electronic Low Tension Switch. <u>E. L. Kantor</u>	714	40
Lowering of the Bottom Limit for Measuring Inductances by a Bridge Method Combined with Substitution. <u>G. Ya. Gurovich</u>	716	42
A Portable Attachment for Checking Tube Voltmeters. <u>A. D. Taratenko</u>	717	43
A Method of Extending the Range of EMF Measurements by DC Potentiometers, <u>E. P. Maslov</u>	718	43
Measurements at High and Superhigh Frequencies		
The Limiting Q Values of Crystal Resonators. <u>E. D. Novgorodov</u>	720	44
Measurements of the Carrier Frequency of the RB-79 Radio Station by Means of the Heterodyne Method Using a KG-B Crystal Oscillator. <u>V. P. Kitavin</u>	722	46
Optical Measurements		
Checking the Flatness of Micromirrors by the Interference Method. <u>L. D. Drozdova</u>	723	46
Reviews and Reports		
Methods of Checking Electricity Meters. <u>A. M. Ilyukovich</u>	725	48
Material Received by the Editorial Board		
Not Paltry, but Fundamental Problems. <u>A. G. Ivanov</u>	732	54
A Plea for Extending the Rights and Duties of the Industrial Test Laboratories, <u>M. I. Malakhov</u>	733	55
Improvement in the Supply of Measuring and Test Equipment. <u>I. D. Shamin</u>	734	56
Information		
Radio Measuring Equipment at the German Democratic Republic Exhibition of Electronic Instruments. <u>V. P. Rynkevich</u>	736	57
The Polish Industrial Exhibition	738	59
The Czechoslovak Exhibition of Measuring Equipment and Electronics. <u>G. L. Grin</u>	740	60
A Conference on Electrical Circuits Using Rectifiers. <u>V. P. Sigorski</u>	743	62
The Committee of Standards, Measures, and Measuring Instruments		
A Checking Scheme and Measuring Apparatus in the Sphere of Angular Measurements	744	62
New Standardizing Documents for Measures and Measuring Instruments Approved by the Committee	746	64

MEASUREMENT TECHNIQUES

1959, Number 10

October

CONTENTS

	PAGE	RUSS. PAGE
A Systematic Improvement in Labor Productivity is the Pressing Task of the Committee's Local Agencies. <u>B. L. Sokolov</u>	749	1
Analysis of the Manufacturing Error of a Discrete-Action Integrator. <u>V. A. Volkonskii</u> , <u>M. A. Gol'dinov</u> , <u>S. M. Kessel'man</u> , and <u>A. S. Nemirovskii</u>	752	4
Linear Measurements		
Measurement of Half-Widths of Spectral Lines by Means of a Fabry-Perot Interferometer with Photoelectric Recording. <u>Yu. P. Efremov</u>	756	7
Determination of Parameter R_a of Surface Roughness by Means of a Planimeter. <u>A. N. Kartasheva</u>	761	10
Measurement of the Thickness of Lubrication Layers. <u>A. A. Kut'kov</u>	762	11
Measurements of Mass		
A Truck for Checking Ten-Ton Scales. <u>Ya. I. Keimakh</u>	765	13
Automatic Compensation of Electrotensometric Scales. <u>V. I. Zhukovitskii</u>	768	16
Thermotechnical Measurements		
Measurements of Temperature in High-Pressure Chambers by Means of Thermistors. <u>N. P. Grashdankina</u> , <u>L. I. Domanskaya</u> , and <u>A. K. Kikoin</u>	771	18
Temperature Measurements in the Range of 300-500°C. <u>B. S. Estrin</u> and <u>P. B. Kantor</u>	774	21
A Thermoelectric Method of Evaluating the Purity of Platinum for Standard Thermocouples. <u>B. K. Bragin</u>	776	22
Electrical Measurements		
Recording of Electrical Energy Consumption on an Oscillogram. <u>V. Yu. Chudnovskii</u>	779	24
Determination of Frequency Characteristics in Designing Automatic Control Systems. <u>A. S. Lifshits</u> and <u>I. A. Dedok</u>	781	26
A Simple Method of Measuring High-Value Resistors. <u>V. I. Ivanov</u>	782	27
A Device with Two Degrees of Freedom for Measuring Vector Quantities. <u>L. F. Kulikovskii</u> and <u>P. P. Kemeshis</u>	784	28
Equal Sensitivity Curves in AC Bridge Circuits with Phase-Sensitive Indicators. <u>V. Yu. Kneller</u>	789	32

CONTENTS (continued)

	PAGE	RUSS. PAGE
Measurements at High and Ultrahigh Frequencies		
Measurements of Current by Means of Thermistor Bridges at Frequencies up to 1000 Mc. <u>G. M. Strizhkov and B. E. Rabinovich</u>	797	38
A Cascade Reflex Voltmeter. <u>Yu. V. Mikhatskii</u>	800	40
A Reactive Method of Measuring Dielectric Losses. <u>K. S. Polulyakh</u>	802	42
Measurement of Volume		
Calibration in Centimeter Steps of Horizontal Tanks with Cylindrical Bottoms. <u>E. N. Lessig</u>	808	45
Measurement of Liquid and Gas Flow		
Consumption-Measuring Differential Manometers with Automatic Correction for Several Gas Parameters. <u>M. D. Gafanovich</u>	810	47
Measurements of Small Consumptions of Mazut. <u>K. I. Didenko and V. M. Levin</u>	816	51
Measurement of Melting Levels. <u>B. A. Glagovskii</u>	819	54
Material Received by the Editorial Board		
The Organization and Activity of Industrial Test Laboratories. (Comments on K. N. Katsman's Article.) <u>A. I. Suvorov</u>	822	56
Information		
The All-Union Scientific Conference on Radiotechnology. Work in the Sphere of Radio Measurements	828	61
Conference on the Production of Laboratory Balances	832	63
The Committee of Standards, Measures and Measuring Instruments		
Measures and Measuring Instruments Approved by the Committee as the Result of State Tests and Passed for Use in the USSR	833	64

CONTENTS

	PAGE	RUSS. PAGE
Important Problems in Developing State Standardization and Normalization.	835	1
Linear Measurements		
Certain Problems of Accuracy in Automatic Checking of Dimensions. <u>M. I. Kochenov</u>	837	3
A Set of Measures and Instruments for Mobile Automobile Laboratories. <u>B. N. Vorontsov</u> ..	849	13
Operating Time of Pneumatic Measuring Systems. <u>A. P. Kurochkin</u> and <u>F. V. Tsidulko</u>	851	15
Selecting a Method of Reference in Measuring the Undulation of Antifriction Bearing Races. <u>V. V. Matveev</u> and <u>V. L. Ryaskov</u>	855	18
Measurement of Mass		
Certain Problems of Weighing Technique in Railroad Transport. <u>K. N. Malakhov</u> and <u>V. N. Korotkov</u>	858	21
A Rationalized Method of Checking Scale Cars. <u>E. E. Zaslavskii</u>	861	24
Measurements of Time		
An Instrument for Checking Chronometers. <u>A. I. Konstantinov</u>	863	24
Mechanical Measurements		
A Thermodynamic Scale for High Pressures up to 25,000 kg/cm ² . <u>M. K. Zhokhovskii</u> , <u>V. N. Pazuminkhin</u> , <u>E. V. Zolorykh</u> , and <u>L. L. Burova</u>	865	26
New S-Shaped Springs for Manometric Instruments. <u>I. A. Sychev</u>	869	29
A Portable Press for Checking Manometers. <u>S. F. Yakubov</u>	872	32
A Seismic Vibration Transducer with Helical Springs. <u>L. D. Gik</u>	872	32
Magnetic Tape Recording of Oscillograms of Infrasonic Processes. <u>V. A. Nosov</u>	873	33
Thermotechnical Measurements		
Evolving a Practical Temperature Scale in the Region of 10-90°K. <u>D. N. Astrov</u> , <u>A. S. Borovik-Romanov</u> , <u>M. P. Orlova</u> , and <u>P. G. Strelkov</u>	876	35
A Semiconductor Thermocryostat for Calibration of Standard Thermometers. <u>A. S. Dzyuba</u> and <u>P. B. Kantor</u>	880	39
Electrical Measurements		
A Digital Electronic Instrument for Production Testing of Condensers. <u>V. G. Zhelnov</u>	882	40

CONTENTS (continued)

	PAGE	RUSS. PAGE
On the Operation of the Vibrating-Reed Inverter in a DC Amplifier. <u>V. Z. Naiderov</u>	886	43
Check-Testing of Induction-Type Standard Meters by a Thermoelectric Method. <u>I. N. Osher and I. I. Bobkovskaya</u>	889	45
Improvement of the Differentiation Circuit for Testing of Potentiometers without a Standard Cell. <u>S. M. Kal'f-Kalif</u>	890	46
Method for Adjustment and Sensitivity Control of a Potentiometer-Type Voltmeter. <u>V. S. Golub</u>	892	47
A Device for Remagnetizing Magnets in Instruments Under Repair. <u>A. I. Rusakov</u>	893	48
Measurements at High and Superhigh Frequencies		
A Transistorized Universal Electronic Computer. <u>G. P. Vkhrov</u>	895	49
Measurement of Power in the Millimeter Microwave Range. <u>A. I. Brodskii</u>	898	52
Optical Measurements		
An Optical Method of Measuring Strain in Flat Walls. <u>Yu. A. Magnitskii</u>	900	53
Reviews and Reports		
Methods of Constructing Electronic Discrete-Action Digital-Display Instruments and Their Relative Evaluation. <u>G. L. Grin</u>	902	54
Material Received by the Editorial Board		
Working Experience of Weighing-Equipment Repair Shops Attached to the Chernigov Region Tractor Repair Stations. <u>M. A. Svirlov</u>	910	62
Factory Description of Instruments. <u>N. N. Kalashnikov</u>	911	62
Notes on Amendment No. 1 to Instructions 220-55 on Checking Heterodyne Frequency- Meters Type GCh-1M. <u>V. Ya. Volodarskii</u>	911	63
Useful Courses. <u>P. N. Stebelev</u>	912	63
Installing Laboratories in Two-Axle Trailers. <u>A. F. Bugakov</u>	913	64
Information		
International Symposium on the Metrology of Radioactive Isotopes. <u>K. K. Aglintsev and V. V. Bochkarev</u>	914	64
The Third International Conference on "Measurements of Hardness in Theory and Practice." <u>V. V. Varnello and N. P. Slavina</u>	916	65
Conference for the Exchange of Experience in Introducing New Measurement Techniques. <u>D. M. Sizov</u>	917	66
The Committee of Standards, Measures, and Measuring Instruments		
I. New Specifications for Measures and Measuring Instruments	919	67
II. Measures and Measuring Instruments Approved by the Committee as the Result of State Tests and Passed for Use in the USSR.	919	67

MEASUREMENTS TECHNIQUES

1959, Number 12

December

CONTENTS

	PAGE	RUSS. PAGE
To Improve Measurement Techniques in Agriculture. <u>M. A. Aver'yanov</u>	923	1
New Rules for State Testing of Measures and Measuring Instruments. <u>L. M. Zaks, N. M. Karlin, and N. I. Tyurin</u>	925	3
A Method of Determining Variance in the Presence of a Linear Systematic Error. <u>A. Yu. Gidel'</u>	928	6
Linear Measurements		
Stability of Block Gauges. <u>A. Z. Polkova</u>	932	8
Hydraulic Method of Measuring Length. <u>V. G. Shtein</u>	934	10
Remote Measurements of Large Displacement Angles. <u>A. D. Barinberg</u>	938	12
Measurement of Dimensions in Inaccessible Places. <u>L. A. Kuptsov</u>	939	13
Measurement of Small Angles. <u>V. I. Nikolaev</u>	940	14
Controlling the Curvature of Thread Gauges. <u>N. M. Zhuravlev</u>	940	14
Checking Low-Module Gears. <u>I. M. Efuné</u>	944	17
Evaluation of Circular Components by the Harmonic Analysis Method. <u>M. S. Mirkin</u>	946	19
Mechanical Measurements		
Checking Unidirectional Hydraulic Pulsating Test Machines. <u>F. S. Savitskii</u>	953	23
Errors in Checking Dynamometers with a Constant Load. <u>O. N. Fofanov</u>	955	24
Thermotechnical Measurements		
Establishment of a Practical Temperature Scale in the Range of 10-90°K. <u>A. S. Borovik-Romanov, M. P. Orlov, and P. G. Strelkov</u>	961	28
A Liquid Thermostat for High Temperatures. <u>A. M. Sirota and B. K. Mal'tsev</u>	969	33
Electrical Measurements		
Compensated Semiconductor Stabilizers Used as Powerful Sources of Reference Voltage. <u>S. D. Dodik</u>	970	34
A Method of Designing Single-Ended Self-Stabilizing Direct-Coupled Instrument Amplifiers. <u>V. A. Baramidze and I. G. Gol'dreer</u>	977	39
A Miniature Resistance Box for Checking Ratio Meters and Bridges. <u>P. A. Griban'</u>	983	44
Measurements at High and Superhigh Frequencies		
Application of a Waveguide Bridge for Matching Detector and Generator Sections. <u>A. N. Akhiezer and A. I. Brodskii</u>	984	44
		1043

CONTENTS (continued)

	PAGE	RUSS. PAGE
Measurements of Mass		
The Effect of Temperature Variations on the Characteristics of Analytical Balances. <u>S. L. Kal'manovich and A. P. Efremov</u>	987	46
Radiation Measurements		
Calibration of γ -Dosimeters by Means of Diaphragm Beams. <u>Z. P. Balon, R. F. Keller, G. P. Ostromukhova, and V. N. Tulin</u>	989	47
Measurement of Fast Neutron Fluxes with an Individual Dosimeter. <u>R. S. Belova and I. I. Yankovskii</u>	994	51
Determining the Mass Content of Binary System Components by the Method of Alternating β - and γ -Radiations. <u>V. S. Merkulov and A. V. Klimushev</u>	996	52
Reviews and Reports		
An Austrian Mobile Inspection Laboratory	999	54
Discrete Measuring of Changing Flows by Means of Various Tracers. <u>G. P. Katys</u>	1001	56
Material Received by the Editorial Board		
Checking Taximeters in Taxicab Establishments. <u>M. S. Varivoda</u>	1006	60
Drawing Boards with Guiding Rules. <u>V. S. Golub</u>	1007	60
Information		
Conference on Automation and Mechanization of the Control Equipment in Linear and Angular Measurements. <u>V. Ya. Eldinov</u>	1008	61
Index		
Author Index 1959	1013	
Table of Contents for 1959	1021	

